

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
14 April 2005 (14.04.2005)

PCT

(10) International Publication Number  
**WO 2005/033404 A1**

(51) International Patent Classification<sup>7</sup>: D21C 11/06, 11/12

(21) International Application Number:  
PCT/FI2004/000581

(22) International Filing Date: 4 October 2004 (04.10.2004)

(25) Filing Language: Finnish

(26) Publication Language: English

(30) Priority Data:  
20031438 3 October 2003 (03.10.2003) FI

(71) Applicant (for all designated States except US): OY  
METSÄ-BOTNIA AB [FI/FI]; FI-44100 Äänekoski (FI).

(72) Inventors; and

(75) Inventors/Applicants (for US only): REILAMA, Ismo  
[FI/FI]; Rantatie 1431, FI-27340 Reila (FI). ANNALA,  
Kaisu [FI/FI]; Renginpölku 8 B 14, FI-00410 Helsinki (FI).

(74) Agent: SEPPÖ LAINE OY; Itämerenkatu 3 B, FI-00180  
Helsinki (FI).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.

(54) Title: DESULPHURIZATION OF ODOROUS GASES OF A PULP MILL

(57) Abstract: The invention relates to a method and an arrangement for the removal of concentrated odorous gases of a pulp mill. According to the method, the concentrated odorous gases containing sulphur compounds are collected from the odorous gases of the sulphite pulp mill and combusted with under air to oxidize the sulphur compounds, so that at least an essential part of the sulphur compounds is oxidized into elemental sulphur. The elemental sulphur is recovered in a liquid or solid form. It can be returned to the process or used in other processes.

WO 2005/033404 A1